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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/587,108 | 01/24/2007 | Andre Harmen Sijpkes | 903-195 PCT/US | 9349 |
| 23869 | 7590 | 08/06/2009 | EXAMINER | |
| HOFFMANN & BARON, LLP 6900 JERICHO TURNPIKE SYOSSET, NY 11791 | | | | NGUYEN, CAM N |
| ART UNIT | | PAPER NUMBER | | |
| 1793 | | | | |
| MAIL DATE | | DELIVERY MODE | | |
| 08/06/2009 | | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/587,108 | SIJPKES ET AL. | |
| | Examiner | Art Unit | |
| | Cam N. Nguyen | 1793 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 04/03/09 (an election).
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 53-62 is/are pending in the application.
 4a) Of the above claim(s) 33-52 and 63 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 53-62 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/21/06</u> . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Response to Election/Restrictions

1. Applicant's election with traverse of Group II, claims 53-62, in the reply filed on 04/03/09 is acknowledged. The traversal is on the ground(s) that "Such reasoning by the Examiner clearly contraverses PCT Rule 13.1 because claims with a common special technical feature have unity of invention even though the claims may be drawn to different categories." This is not found persuasive because of the following reasons.

The chromium-free catalyst comprising Cu and at least one second metal claimed in Group II is known in the art (see art cited on PTO-892 Form attached). Thus, since the catalyst is not novel, there is a lack of the same or corresponding special technical features between Group I, Group II, & Group III inventions. While Group II catalyst claims depend upon the process claims of Group I, the determination of patentability of product claims are based on its structure, composition, and characteristics of the product claims itself and not the process steps of how the product is prepared. In any event, if the elected product claims are found allowable, the method of making and method of use claims depend therefrom or otherwise include the allowable subject matter of the elected product claims will be rejoined. Furthermore, Group I invention is currently not depending upon Group II invention, but vice versa. For purpose of search and examination on the merits, the three different groups of inventions must be restricted.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 33-52 & 63 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention(s), there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 04/03/09.

Specification

3. The examiner has not checked the specification to the extent necessary to determine the presence of **all** possible minor errors (grammatical, typographical, and idiomatic). Cooperation of the applicant(s) is requested in correcting any errors of which applicant(s) may become aware of in the specification, in the claims and in any further amendment(s) that applicant(s) may file. Applicant(s) is also requested to complete the status of the copending applications referred to in the specification by their Attorney Docket Number or Application Serial Number, **if any**.

The status of the parent application(s) and/or any other application(s) cross-referenced to this application, **if any**, should be updated in a timely manner.

Claim Objections

4. Claims 53-62 are objected to because of the following informalities:

- A. In claim 53, line 2, “obtainable” should be changed to recite –prepared--.
- B. Claim 53 is depending upon a non-elected claim 33. Since claim 33 is withdrawn, the subject matter of claim 33 must be incorporated into the elected claim 53 for examination.

C. In claim 56, line 2, "as at least one second metal Co or Ni, or a combination thereof" should be changed to recite -- at least one second metal chosen from Co, Ni, or combination thereof--.

D. In claim 57, line 2, "Pd and Pt" should be changed to recite --Pd, Pt--.

E. In claim 60, line 2, "as at least one second metal Co or Ni, or a combination thereof" should be changed to recite -- at least one second metal chosen from Co, Ni, or combination thereof--.

F. In claim 61, line 2, "Pd and Pt" should be changed to recite --Pd, Pt--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102(b)/103

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A. **Claim 53** is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over *Wilkes '479*, (US Pat. 4,199,479).

Wilkes '479 discloses a catalyst composition comprising from about 1 to about 99 percent by weight of a hydrogenation component comprising copper in elemental, hydroxide, carbonate, hydroxy-carbonate or oxide form and zinc oxide and having incorporated therewith in intimate admixture from about 1 to about 30 percent by weight of silica (see col. 16, claim 1).

B. **Claim 53** is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over **Habermann '581**, (US Pat. 4,153,581).

Habermann '581 discloses a catalyst which comprises, calculated in mole percent and on an oxide-free basis, about: (1) 20 to about 90 percent of cobalt; (2) 8 to about 72 percent of copper; and (3) 1 to about 16 percent of a third component selected from the group consisting of iron, zinc, zirconium and mixtures thereof (see col. 7- col. 8, claim 1).

C. **Claim 53** is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sofianos et al., hereinafter referred to as "**Sofianos '497**", (US Pat. 6,054,497).

Sofianos '497 discloses a catalyst comprising copper oxide, zinc oxide and zirconium oxide, in the proportions of from 10 to 70 percent by weight of Cu, from 10 to 50 percent by weight of Zn and from 20 to 80 percent by weight of Zr, and with the proviso that said catalyst contains less than 5 percent by weight of a cobalt (see col 6, claim 9).

Product-by-Process limitations in the claims have been noted. While the products of the above references are not made by the same process, the products disclosed are the same as

being claimed. It has been held that the patentability of the product and its method of production are separately determined. Thus, even though the process limitations in the claims are not disregarded, they have no bearing on the patentability of the claims product per se. See In re Thorpe, 227 USPQ 964 (Fed. Cir. 1985); In re Brown, 173 USPQ 688, 688 (CCPA 1977); In re Fessman, 180 USPQ 324, 326 (CCPA 1977). See also MPEP 2113.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A. **Claims 54-55** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Wilkes '479*, (US Pat. 4,199,479).

Wilkes '479 discloses a catalyst composition as described above, except for the claimed atomic ratio of Cu to the at least one second metal (or Zn) being 0.1-10.

B. **Claims 55-56 & 59-60** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Habermann '581*, (US Pat. 4,153,581).

Habermann '581 discloses a catalyst as describe above, except for the claims atomic ratio of Cu to the at least one second metal (Zn or Fe) being 0.1-10.

C. **Claims 54-56** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sofianos et al., hereinafter referred to as "**Sofianos '497**", (US Pat. 6,054,497).

Sofianos '497 discloses a catalyst as described above, except for the claims atomic ratio of Cu to the at least one second metal (Zn or Fe) being 0.1-10.

However, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have optimized such Cu and (Zn or Fe) ratios in the above applied references in order to achieve an effective catalyst because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

See In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). See also In re Aller, 105 USPQ 233.

D. **Claims 57-58 & 61-62** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wilkes '479**, **Habermann '581**, and **Sofianos '497**, as applied to claims above, and further in view of Khare et al., hereinafter referred to as "**Khare '074**", (US Pat. 6,930,074 B2).

Wilkes '479, **Habermann '581**, and **Sofianos '497** disclose catalyst compositions as described above, except for the limitation on "the catalyst further comprising at least one third metal chosen from Rh, Ru, Pd, Pt, and combinations thereof".

It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have incorporated such known promoter metals into the catalyst compositions of the above applied references in order to achieve an improved catalyst having

promoted in activities because they are known as useful catalyst promoters, as evidenced by ***Khare '074*** (see ***Khare '074*** at col. 17- col. 18, claims 1-9).

Citations

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. All references are cited for related art. See PTO-892 Form prepared attached.

Conclusion

8. Claims 33-63 are pending. Claims 53-62 are rejected. Claims 33-52 & 63 are withdrawn due to nonelected (distinct) invention(s). No claims are allowed.

Contacts

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner CAM N. NGUYEN, whose telephone number is 571-272-1357. The examiner can normally be reached on M-F, 9:00 AM - 6:30 PM, at alternative work site.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Cam N. Nguyen/

Primary Examiner

Art Unit: 1793

/C. N. N./

August 03, 2009